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ABSTRACT

This report examines how states and local school districts have been dealing with the issues facing their public school facilities, including: (1) the trends since 1990 in elementary and secondary school construction expenditures and how these expenditures were divided between land, buildings, and equipment; (2) trends since 1990 in the amount of expenditures for elementary and secondary school construction by type of school and type of construction; and (3) the amounts and mix of state and local funding for elementary and secondary school construction. Data show a 39 percent increase in elementary and secondary school construction annual expenditures. Most of the increase was for new buildings; expenditures for equipment such as heating and air conditioning systems only slightly increased during the eight-year period. It also reveals most of the construction expenditures was for construction of primary schools and high schools, and most of the contract spending was for new facilities and additions to existing facilities, with less being spent on renovations. Fifteen states provided little or no funding in 1998-99. Appendices provide the scope and methodology of the research, statistical tables, and comments from the Department of Education. (GR)

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ED 440 523

United States General Accounting Office

GAO

Report to the Chairman, Committee on Education and the Workforce, House of Representatives

March 2000

SCHOOL FACILITIES

Construction Expenditures Have Grown Significantly in Recent Years

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Abbreviations

CCD	Common Core of Data
NCES	National Center for Education Statistics

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United States General Accounting Office
Washington, D.C. 20548

Health, Education, and
Human Services Division

B-282314

March 3, 2000

The Honorable William F. Goodling
Chairman, Committee on Education and the Workforce
House of Representatives

Dear Mr. Chairman:

More than 45 million elementary and secondary students attend approximately 86,000 public schools in the United States. While enrollments are growing, the Department of Education has found that the average public school building in 1998 was 42 years old, and in 1995 we reported that about a third of the nation's public schools needed extensive repair or replacement of one or more buildings.[1] Funding for school construction has generally been the responsibility of local school districts and, more recently, the states, while only limited federal funding has been available for this purpose. However, a number of congressional proposals would expand the federal role in financing school construction. To determine how states and local school districts have been dealing with the issues facing their public school facilities, you asked us to determine (1) the trends since 1990 in elementary and secondary school construction expenditures and how construction expenditures were divided between land, buildings, and equipment; (2) the trends since 1990 in the amount of expenditures for elementary and secondary school construction by type of school and type of construction; and (3) what is known about the amounts and mix of state and local funding for elementary and secondary school construction.

In conducting this study, we obtained and analyzed construction expenditure and enrollment data from Education's National Center for Education Statistics (NCES) and construction contract expenditure data collected by a private firm.[2] We also identified and reviewed research on the sources of financing school construction and conducted a telephone

[1] *School Facilities: Condition of America's Schools* (GAO/HEHS-95-61, Feb. 1, 1995).

[2] We used data from F.W. Dodge Inc., a division of McGraw-Hill Companies, for our analyses of expenditures by kind of school and by kind of construction project because Education's data do not contain such breakouts. Appendix I explains the two databases we used for our analyses.

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inquiry of each of the 50 state education agencies to determine the availability of data on school construction funding. We conducted our work between February and December 1999 in accordance with generally accepted government auditing standards. (Appendix I describes our scope and methodology in more detail.)

Results in Brief

Annual construction expenditures for elementary and secondary schools across the nation grew by 39 percent from fiscal year 1990 through fiscal year 1997 to about $25 billion after adjusting for inflation.[2] This trend, according to reports by Education and others, reflects a variety of factors, including higher enrollments, a strong economy, and an increasing need to replace old buildings. Most of the increase in expenditures was for the construction of buildings; expenditures for equipment such as heating and air conditioning systems increased only slightly during the 8-year period, and spending on land and for the purchase of buildings such as portable classrooms showed a net decline. Average annual construction expenditures per pupil varied widely from state to state, ranging from $934 in Nevada to $37 in Connecticut. States with the largest expenditures per pupil, such as Nevada, tended to also have the highest enrollment growth rates, and those with the lowest expenditures per pupil had relatively low enrollment growth rates.

Most of the growth in construction expenditures during calendar years 1990 through 1998 was for construction at primary schools and high schools, according to data on construction contracts. Also, most of the contract spending from 1990 through 1998 was for new facilities and additions to existing facilities, with significantly less being spent on renovations.

The largest source of funding for school construction is generally local construction bonds. However, no current and complete database shows the sources of funding for school construction. As a result, nationwide data on how amounts and portions of funds are divided between localities and states are not available. Studies show a range in the degree to which the states rely on local and state funding for school construction projects. While in most states some combination of local and state funding supports

[2] We converted all Education data for the fiscal years before 1997 to constant fiscal year 1997 dollars and all F.W. Dodge data for the calendar years before calendar year 1998 to constant 1998 calendar year dollars.

school construction, 15 states provided little or no funding in 1998-99. Hawaii, where the school district and the state are coterminous, provides all funding.

Background

In 1995-97, we issued seven reports on the facilities in American schools in which we reported that it would cost about $112 billion to bring them into good overall condition and that about a third (or 25,000) of all public schools needed extensive repair or replacement of at least one building.[4] In addition, a recent Education report estimated that at least 2,400 new public schools will be needed by 2003 to accommodate rising enrollments stemming from the so-called baby boom echo.[5]

Traditionally, funding for school construction has been a local school district responsibility, with some states adding financial support. Indirect federal support for the construction of schools and other capital facilities, such as roads, hospitals, and parks, is provided through the tax system. The interest income individuals and businesses earn on state and local debt is excluded from their taxable income in computing their federal income tax due. This exclusion lowers the interest rate on state and local debt, a reduction in effect paid for by the federal tax revenue not collected on the excluded interest earnings.[6]

The federal government has provided money to help offset the effect of federal activities, such as in making federal Impact Aid payments,[7] improving accessibility for the disabled, and managing hazardous materials.[7] The Education Infrastructure Act of 1994 was enacted to provide federal assistance in addressing school infrastructure problems,

[4]A list of our related products appears at the end of the report.

[5]"Baby boom echo" is the term commonly used to describe the children of the baby boomers, persons born from 1946 to 1964.

[6]Dennis Zimmerman, "Tax-exempt Bond Proposals to Increase Public Elementary and Secondary School Facilities," statement submitted for the hearing record, Senate Finance Committee, *Congressional Research Service* (Washington, D.C., Mar. 3, 1999), p. 1.

[7]Impact Aid provides funds to compensate local school districts affected by federal activities for revenue lost because of the nontaxable status of federal property within their jurisdictions and the cost of educating children who live on or whose parents work on federal property or whose parents are in the military. Some of these funds may be used, for example, for the construction of urgently needed minimum school facilities in districts whose numbers of students increase substantially as a result of federal activities.

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but the program has not been funded. The Taxpayer Relief Act of 1997 authorized tax credits for holders of qualified zone academy bonds whose proceeds can be used for school infrastructure, such as public school rehabilitation and repair. In 1999, the legislation extended the authority to issue these bonds to 2000 and 2001 and increased the total authorization for them. In its fiscal year 2000 budget, the administration proposed a school construction and modernization tax incentive, which if enacted would support $22 billion in interest-subsidized bonds over a 2-year period to help build and repair schools.

Several proposals introduced in the 106th Congress would, if enacted, provide new federal financing for school construction. For example, one proposal would allow the Federal Home Loan Bank to guarantee $500 million annually in public bonds for school construction. However, by December 1999, the Congress had passed none of these proposals, and localities and states continue to provide nearly all school construction financing.

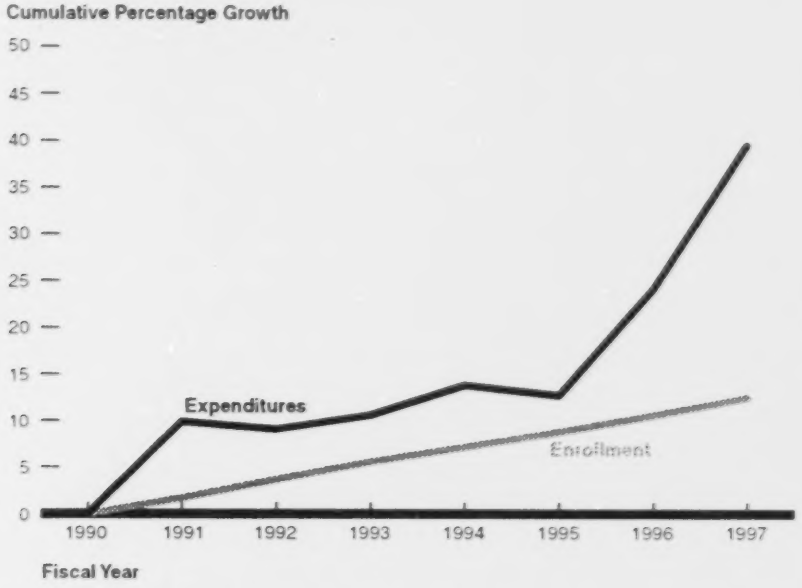
Expenditures for Constructing and Renovating School Facilities Increased Significantly in the 1990s

Education's data indicate that annual school construction expenditures (including those for acquired and constructed buildings, land, and equipment) increased nationally by 39 percent from fiscal year 1990 through fiscal year 1997. Overall, the largest increase was in the cost of constructing new buildings and additions to existing ones rather than purchasing existing buildings, land, and equipment. Education's data also show that the states varied widely in their construction expenditures per student during this 8-year period.

School Construction Expenditures Grew Substantially From Fiscal Year 1990 Through Fiscal Year 1997

In fiscal years 1990-97, total school construction expenditures increased from about $17.8 billion to about $24.7 billion. This 39 percent increase was more substantial than the rise in enrollment, which grew about 12 percent during the same period. As figure 1 illustrates, a large part of the growth in construction expenditures came in 1996 and 1997. Whereas the 1990-95 expenditure growth was about 12 percent, it was twice that, or 24 percent, in 1995-97. (See appendix I for a discussion of data limitations.)

Figure 1: Cumulative Percentage Changes in School Construction Expenditures and Fall Enrollments, Fiscal Years 1990-97

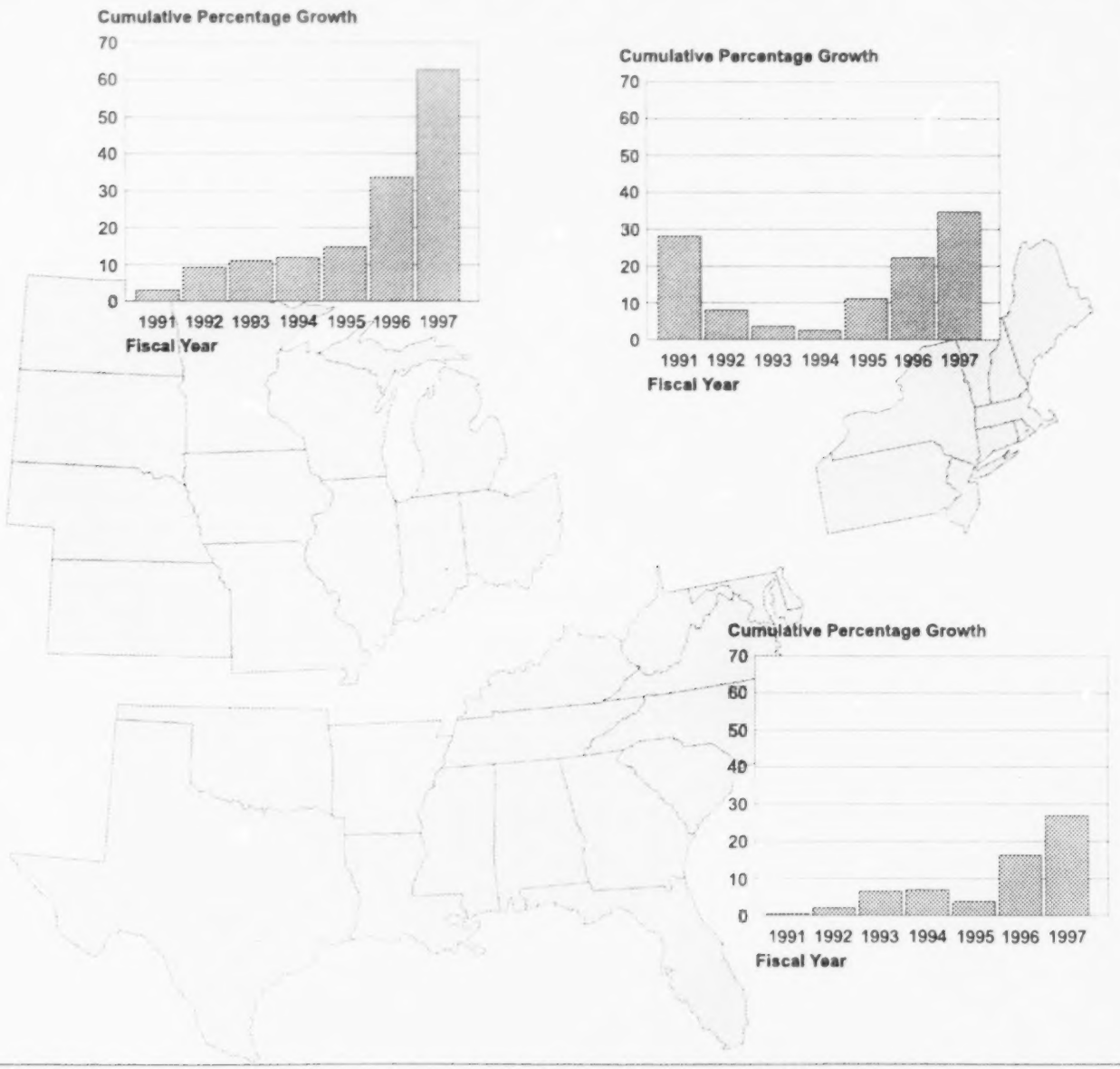


Note: The percentages for construction expenditures are based on numbers that were adjusted to constant 1997 dollars.

Source: U.S. Department of Education

Regionally, the growth in construction expenditures was highest in the Midwest, at 63 percent. As figure 2 illustrates, the growth figures in the Northeast, South, and West were somewhat lower, at 35, 27, and 41 percent, respectively. (See appendix II for more details.)

Figure 2: Regional School Construction Growth Rates, Fiscal Years 1991-97



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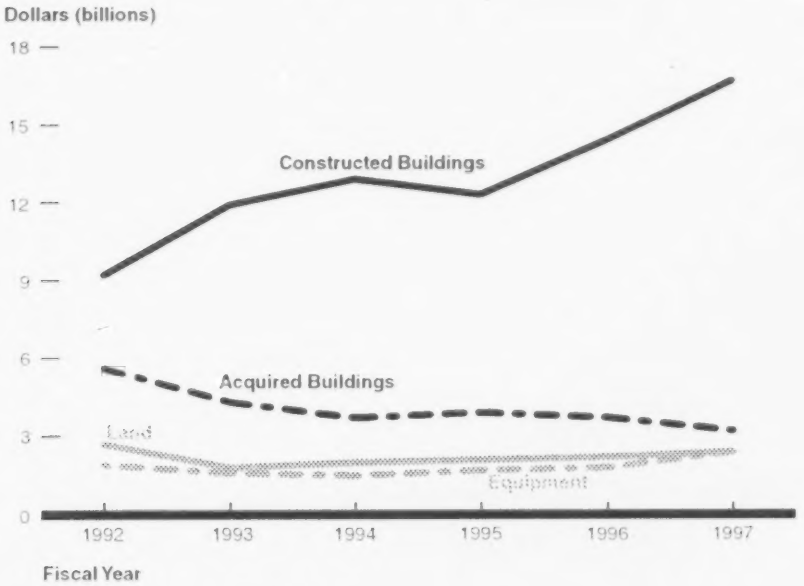
Source: U.S. Department of Education

Spending Increases Are Largest for the Construction of School Buildings

From fiscal year 1992 to fiscal year 1997, the largest increase in annual school construction expenditures was for the construction of buildings.[5] Expenditures for such construction increased by 81 percent, from about $9.2 billion in fiscal year 1992 to about $16.7 billion in fiscal year 1997. Expenditures for purchasing acquired buildings, such as portable classrooms, dropped by 42 percent, from about $5.5 billion in fiscal year 1992 to about $3.2 billion in fiscal year 1997. While annual expenditures for land decreased by about 12 percent, expenditures for equipment increased by about 29 percent. (See fig. 3.)

Figure 3: School Facilities Acquisition and Construction Expenditures, Fiscal Years 1992-97



Note: In billions of constant 1997 dollars.

Source: U.S. Department of Education.

Some regions were exceptions to these national patterns. For example, the South had an increase in annual expenditures for acquired buildings from

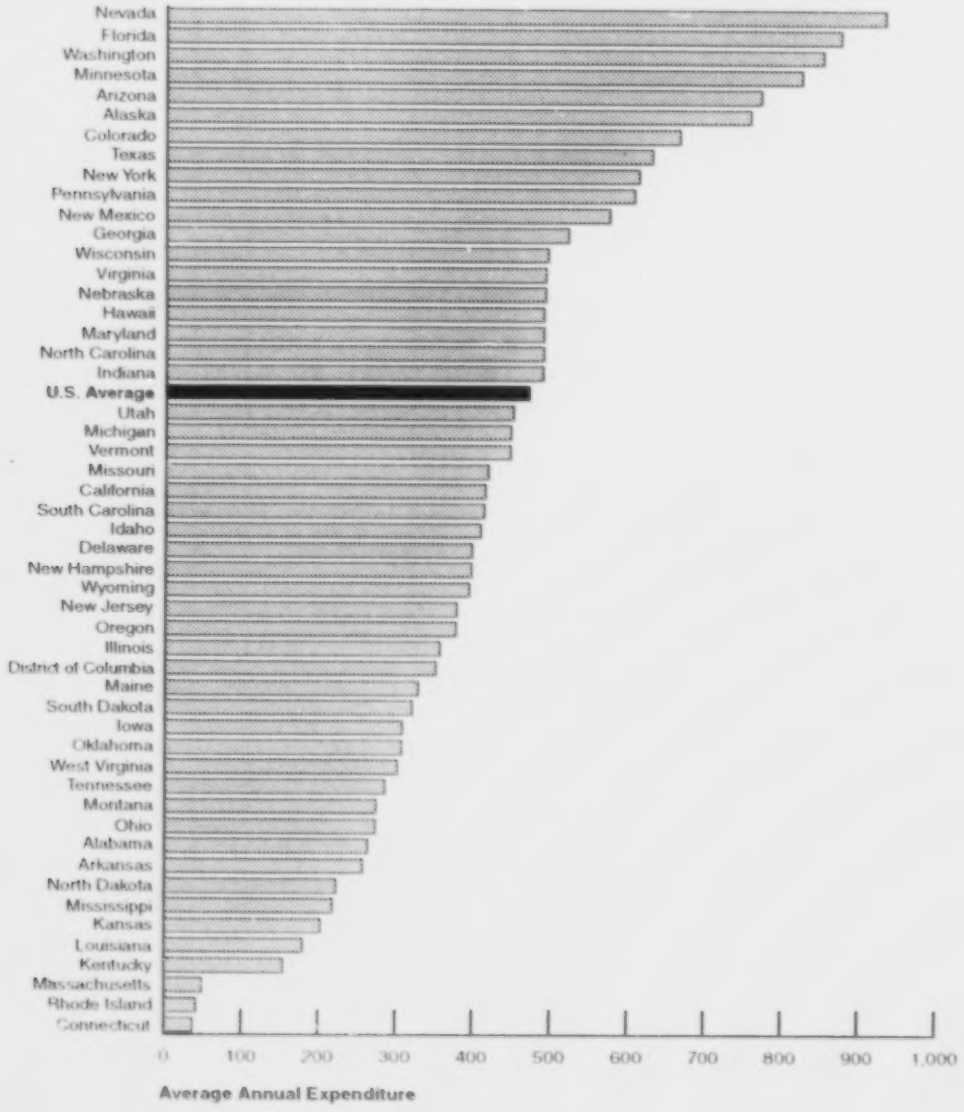
[5]Fiscal year 1992 is the earliest year for which the available data contain the expenditure components used for this analysis.

fiscal year 1992 to fiscal year 1997 of about 57 percent, while these expenditures in other regions declined. (Appendix III provides more details.)

The States' School Construction Expenditures per Student Vary Widely

Average annual school construction expenditures per student from fiscal year 1990 through fiscal year 1997 varied widely. Per-student expenditures in the state with the highest expenditures were more than 25 times greater than in the state with the lowest expenditures. For example, Nevada had the highest average annual expenditure at $934 per student. In contrast, Connecticut, the state with the lowest average annual expenditure, spent $37 per student, or about $900 less than Nevada. As a whole, the nation spent an average of about $473 per student per year over the 8-year period. Figure 4 shows how all the states compared with the U.S. average. (Appendix IV provides more detailed state-by-state data.)

Figure 4: Average State Construction Expenditures per Student, Fiscal Years 1990-97



Note: In constant 1997 dollars.

Source: U.S. Department of Education.

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In general, the states that had the highest per-student annual expenditures for school construction also tended to have the highest average enrollment growth rates, and the states that had the lowest per-student expenditures had significantly lower enrollment growth rates. For example, the average enrollment growth rate of the 10 states with the largest per-student expenditures was about 22 percent from 1990 through 1997. In contrast, the 10 states with the lowest per-student expenditures had an average enrollment growth rate of about 6 percent.

Annual Construction Contract Expenditures Have Increased Sharply

According to F.W. Dodge's data, contract expenditures for the construction of primary and high school facilities increased substantially in calendar years 1997 and 1998. F.W. Dodge's data are somewhat narrower than Education's in that they do not include expenditures for land, acquired buildings, and equipment, but they do provide more detail about the types of buildings and kinds of schools. F.W. Dodge's data indicate that most contract expenditures went for new buildings and additions at primary and high schools. The renovation of existing buildings received a smaller portion, as did all kinds of construction projects at middle schools.[9]

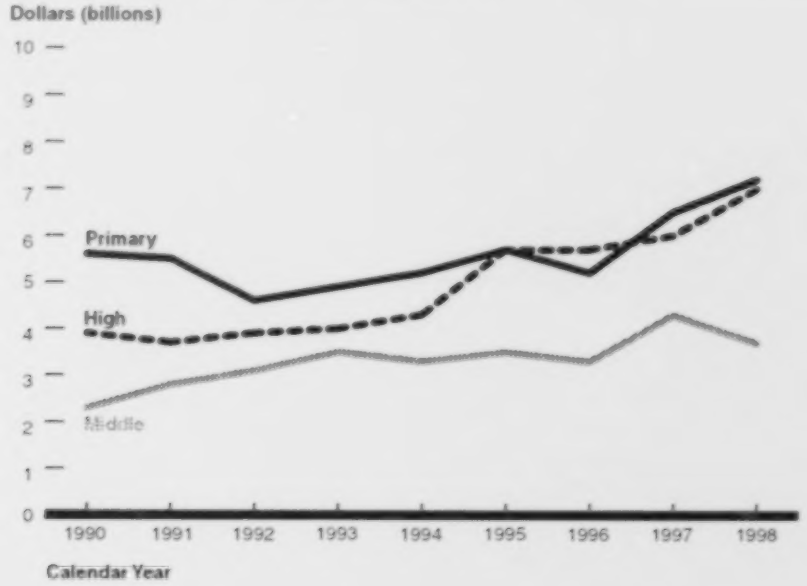
Construction Contract Expenditures for Primary and High Schools Grew at an Accelerated Rate in 1997 and 1998

Annual contract expenditures for constructing primary and high schools grew at an accelerated pace in 1997 and 1998.[10] Expenditures for primary schools had an average annual decline of 1.2 percent from 1990 to 1996 but grew at an average annual rate of 17.4 percent in 1997 and 1998. Annual spending for high schools had a more consistent growth rate during this period. Expenditures for high schools grew at an average annual rate of 6.5 percent from 1990 to 1996 and then increased at an average annual rate of 10.7 percent in 1997 and 1998. Construction spending for middle schools grew at an average annual rate of 9.5 percent from 1990 to 1997 but declined somewhat in 1998. (See fig. 5.)

[9]For the purpose of this report, we used the term "middle schools" to also include junior high schools.

[10]We converted F.W. Dodge's data for the years before 1998 to constant 1998 dollars.

Figure 5: Construction Contract Spending, 1990-98



Note: In billions of constant 1998 dollars.

Source: F.W. Dodge Inc.

The increases for school construction contract spending from 1990 through 1998 were highest in the South for all three types of schools: 55.1 percent for primary schools, 94.1 percent for middle schools, and 143.1 percent for high schools. In contrast, the Northeast had a 3.8 percent decline in spending for primary schools, and the West had a 7.4 percent decline in spending for middle schools. (See table 1.) In general, the high increases in the South were influenced by substantial increases in spending in some states such as Georgia and Texas.

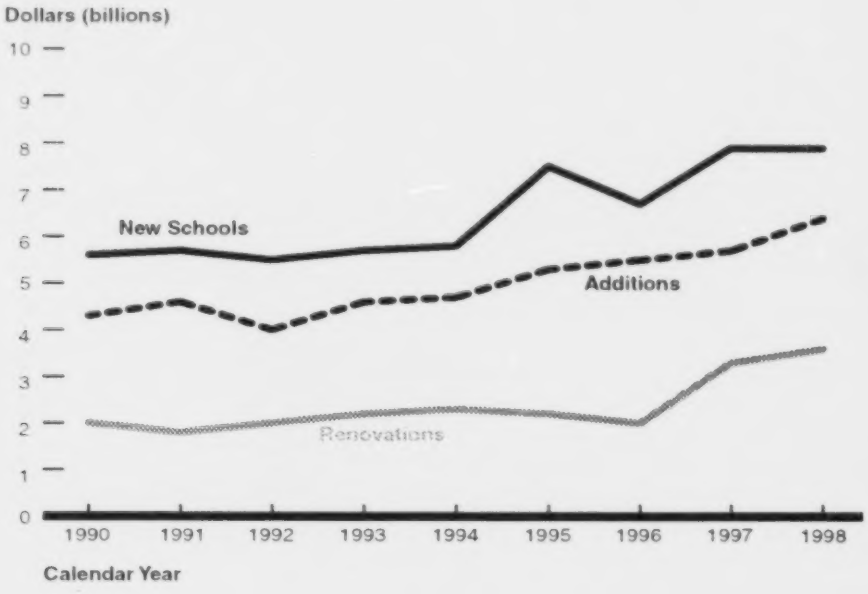
Table 1: Cumulative Percentage Growth Rates for School Construction Contract Spending, 1990-98

Kind of school	Northeast	Midwest	South	West	Total
Primary	-3.8%	46.7%	55.1%	7.5%	28.4%
Middle	60.1	84.7	94.1	-7.4	59.4
High	59.9	79.1	143.1	29.0	79.3

Contract Expenditures Are Greatest for Constructing New Facilities and Additions

In calendar years 1990-98, about $58.2 billion was spent for building new facilities, $45 billion for adding to existing facilities, and $21.3 billion for renovating existing facilities. The distribution of contract expenditures changed somewhat from 1990 to 1998. For example, although renovations were only about 17 percent of total contracted construction spending from 1990 through 1998, this kind of construction project had the greatest percentage increase—82 percent. Increases were 50 percent for additions and 42 percent for new facilities during the same period. As figure 6 shows, whereas contract spending for additions and new facilities grew at a fairly gradual rate, virtually all the growth in annual spending for renovations occurred after 1996. According to some industry experts and others, the substantial growth in renovating schools since 1996 reflects an increased awareness among the general public and state and local officials of the need to repair badly deteriorated school buildings.

Figure 6: Contract Expenditures for Additions, Renovations, and New Schools, 1990-98



Note: In billions of constant 1998 dollars.

Source: F.W. Dodge Inc.

Comprehensive Data on Funding for School Construction Are Not Available

There are no complete and current national data on how much funding for school construction is available annually to each local school district. While many state education agencies keep records of the number and dollar amount of local school construction bonds that voters approve or disapprove each year, most states do not. In addition, there is a wide variance among states in the degree to which they rely on local compared with state funding for school construction projects. Even within states, the amount of state or local funding can vary significantly from year to year. Although a number of states rely on just one of these funding sources, most states use a combination of state and local funding.

National Data Are Limited

While we found information on annual school construction expenditures, we found no national data specifying how these expenditures were financed. After reviewing the available literature and data sources, we concluded that the best source of information on how school construction is funded in each state is a study of public school finance programs in the United States and Canada that was being readied for publication when we completed our review in December 1999.[11] Preliminary information the editors provided to us shows that in the 1998-99 school year 32 states provided $10.3 billion in aid for school facility construction and an additional $228 million for debt service. Three states (Colorado, Delaware, and Wisconsin) indicated that state aid is provided for school construction but that this aid is part of the basic support program and could not be separately accounted for, so no dollar amounts were given. Fifteen states indicated either no support for facilities or minimal funding for which no numbers were given. Those states are Idaho, Louisiana, Michigan, Mississippi, Missouri, Nebraska, Nevada, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, South Dakota, Virginia, and Wyoming. The report does not contain similar data on local funding.

Data on Local Bond Referendums Are Limited

Local general obligation bonds are an important mechanism for financing school construction. However, we found no comprehensive database of the number or dollar amount of local school construction bond referendums that were voted on or passed in 1998. A financial services company collected and maintained a national database of school bond referendums but it is incomplete, and we found that it contained only a small portion of the bond referendums in most of the 19 states from which we obtained bond data. Therefore, we chose to rely on the results of our survey of all 50 states' education agencies.

[11]Catherine C. Sielke and others, eds., "Public School Finance Programs of the United States and Canada 1998-99," draft report.

Although most of the 50 states we contacted in our telephone survey did not maintain comprehensive records of funds that localities provided for school construction, 19 states provided us data on the number and dollar amount of local school bond referendums that passed or failed in 1998.[12] Table 2 summarizes for each of the 19 states the number and dollar amount of measures that passed. It also shows that 455 measures were passed, totaling more than $9 billion and representing 54 percent of both the number and the dollar amount of the local school construction bond referendums that were voted on in these states in 1998.

[12]Three of these states did not keep data on a portion of bonds. Minnesota did not maintain data on bonds of less than $400,000, and Michigan did not have data on bonds that were not submitted to the state for approval before they were voted on. Arkansas did not have data on bonds that did not pass and were not submitted to the state for approval before they were voted on. In addition, Iowa was able to provide bond data for only the first 6 months of 1998.

Table 2: Bonds and Their Amounts Approved in Local School Construction Bond Referendums in 19 States, 1998

State	Number approved	Number approved as a percent of all referendums	Dollar amount approved (millions)	Dollars approved as a percent of the total dollar amount of all referendums
Arizona	12	86%	$253	95%
Arkansas	36	80	103	81
California	72	58	3,742	64
Colorado	19	73	553	87
Georgia[a]	2	100	122	100
Idaho	4	40	28	44
Iowa	14	67	89	72
Michigan	44	41	799	36
Minnesota	46	74	422	77
Mississippi	6	55	77	53
Nebraska	10	45	89	67
North Carolina	3	50	96	53
Ohio	44	39	532	35
Oregon	14	30	389	34
South Carolina	4	29	258	26
Utah	3	100	72	100
Washington	28	51	773	58
Wisconsin	93	56	655	48
Wyoming	1	100	0.5	100
Total	455	54%	$9,052[b]	54%

[a]On March 18, 1997, all school systems in Georgia became eligible to use special purpose local option sales tax revenue for school construction projects if the voters approved a referendum. Only two school systems have since proposed bond referendums in which the bonds would be repaid in part or in whole with property tax revenue. Both were voted on and passed in 1998 and are included in this table.

[b]The sum of the figures in this column exceeds this total because of rounding.

The kinds of information on school construction bonds each state maintained varied. For example, in Oregon, which finances all school construction with local bond issues, the state department of education maintains data on all local school construction bond referendums. These data include the name of the county or school district sponsoring the bond, the date of the vote, the dollar amount of the measure, and whether it

The Wisconsin office of public instruction maintains local school construction bond data similar to Oregon's. It also records the purpose of each bond. For example, its database showed that bonds' proceeds were to be used for such purposes as a new high school, additions to an elementary school, a running track, and a pool facility at a middle school. However, the database does not break out how much of the funds approved in an individual bond referendum were to be used for each purpose when a bond was approved for multiple purposes. For example, the $29,695,000 bond referendum passed for the River Falls School District on December 8, 1998, was for building a new high school, making additions to an elementary school, and renovating a middle school and a high school.

The Mix of State and Local Funding for School Construction Is Unknown

Data are insufficient to determine on a national basis what portion of school construction is financed locally and what portion is financed by the states. The mix of funding between state and local governments varies considerably from state to state. Even within a given state, the mix can change dramatically from year to year, especially when localities approve large bond referendums or when state appropriations or bond referendums are approved.

School construction in most states is financed with a combination of state and local funding, although the mix varies considerably from state to state. A 1998 study by the Education Commission of the States describes school facilities funding as primarily locally funded in 18 states, shared funding in 20 states, and primarily state funding in 13 states.[13] In Hawaii (which has one school district that includes the entire state) all school facilities projects are funded entirely by the state. In our survey of all 50 states, officials in only 9 states informed us that their state did not appropriate any funds for school construction.

Within states, the amount of state or local bond measures passed or state appropriations approved to finance school construction can vary significantly from year to year. For example, as shown in table 3, the bond referendums local school districts approved in South Carolina rose from

[13] Education Commission of the States, "Making Better Decisions About Funding School Facilities" (April 1998). In the study, the states total 51 because South Carolina's school facilities are shown as being both primarily locally funded and using shared funding. Much of the data used in this analysis was from an earlier study entitled "Public School Finance Programs of the United States and Canada, 1993-94."

$120 million in 1994 to $402 million in 1996 and then declined to $258 million in 1998.

Table 3: South Carolina School Bond Referendum Results, 1994-98

	Bonds approved		Bonds rejected	
Year	Number of districts	Dollar amount (millions)	Number of districts	Dollar amount (millions)
1998	4	$258.2	11	$720.3
1997	13	320.3	1	108.0
1996	11	401.7	0	0
1995	4	176.3	3	178.5
1994	5	119.7	3	116.5

Several states and localities have passed large school construction bond measures and several state legislatures have approved appropriations in recent years that have increased their respective roles in financing school construction. For example, in November 1998, California voters passed Proposition 1A, a state school bond initiative that provided $6.7 billion for the construction and repair of K-12 schools over 4 years.[11] Proposition 1A authorized the state to provide funding for 50 percent of the costs associated with building new schools and 80 percent of the costs associated with modernizing existing schools. This increased the state's portion of funding for modernization projects by 30 percentage points from the 50 percent level at which the state allocation board funded previous modernization programs.

[11]Joel Cohen, "School Facility Financing: A History of the Role of the State Allocation Board and Options for the Distribution of Proposition 1A Fund," *California Research Bureau* (Feb. 1999), pp. 2-3 and 31.

Agency Comments

In commenting on a draft of this report, the Department of Education agreed with our finding that school construction expenditures increased in the 1990s. (The comments are printed in appendix V.) Education noted that our report did not attempt to determine the effect that increased school construction expenditures in recent years had on the $112 billion we had previously estimated was needed to bring schools into good overall condition.[15] Our objective was to report on trends in school construction funding rather than on how well state and local governments were meeting their school facilities needs. Additional data beyond those collected for this report would be needed for such an analysis, including updated data on school conditions.

Education also suggested that we expand our discussion of the role of federal tax policy in funding school construction—specifically, the exemption of interest earned on state and local bonds and qualified zone academy bonds. We have done so.

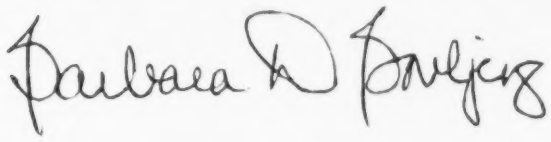
Education said that our statement that school construction expenditures rose 39 percent from 1990 to 1997 while school enrollment rose 12 percent during the period might be misinterpreted. Its concern was that readers might conclude that a 12 percent increase in school construction expenditures could accommodate a 12 percent increase in enrollment. Our only point is that school construction expenditures increased much faster than enrollment during the period. We do not know whether the increase in construction expenditures was sufficient to meet construction needs. Making a judgment about this would have required collecting much more data. Education also provided us with a number of technical comments that we incorporated as appropriate.

We are sending copies of this report to the Ranking Minority Member of the Committee, the Chairman and Ranking Minority Member of the Committee on Health, Education, Labor, and Pensions of the U.S. Senate, the Secretary of Education, other appropriate congressional committees and members, and others who are interested.

[15] GAO/HEHS-95-61, Feb. 1, 1995.

If you have any questions, please call me or Joseph J. Eglin, Jr., Assistant Director, at (202) 512-7215. Major contributors to this report include Charles M. Novak and Charles H. Shervey.

Sincerely yours,



Barbara D. Bovbjerg
Associate Director, Education, Workforce,
and Income Security Issues

Scope And Methodology

To determine the total expenditures per state for K-12 construction and how the expenditures were divided between land, buildings, and equipment, we analyzed annual state-by-state construction expenditure data the Department of Education's National Center for Education Statistics (NCES) obtained from state education agencies through its annual Common Core of Data (CCD) surveys. The U.S. Census Bureau collects these data for NCES. We analyzed these data to identify national and regional trends in school construction expenditures from fiscal year 1990 through fiscal year 1997.[1] We adjusted data for fiscal year 1990 through fiscal year 1996 to constant 1997 dollars, using the gross domestic product price index . For our regional analyses, we used Census regions. Appendix II shows which states are in which region.

To identify trends in school construction expenditures for land, buildings, and equipment, we used fiscal year 1992 through fiscal year 1997 because the data for previous years did not contain the breakouts needed for this kind of analysis. That is, the data for 1992-97 contained a breakout between constructed buildings and acquired buildings such as portable classrooms, but the data for fiscal years 1990 and 1991 did not.

For our analysis of school construction expenditures per student, we used enrollment data Education also collects through its CCD surveys. To make our computations, we matched fall enrollment data with construction expenditure data from the same starting year. For example, we matched fall 1989 enrollment data with fiscal year 1990 construction data because they both began in 1989. We computed the average annual school construction per capita expenditure for each state by dividing the average of annual school construction expenditures for fiscal year 1990 through fiscal year 1997 by the annual average enrollments over the same time period.

Because some data were missing or incomplete, Education adjusted data for some states and we did for others to improve comparability among states or fiscal years. We did not verify the data for accuracy or attempt to obtain missing data; however, Education reviews and edits each state's data for completeness and accuracy. If Education finds potential omissions or errors, it returns the data to the state for correction or verification of its

[1]For purposes of these data, Education uses a fiscal year that begins on July 1 and ends on the following June 30, and it uses the year of the ending date to designate the fiscal year. For example, fiscal year 1990 begins on July 1, 1989, and ends on June 30, 1990.

accuracy. Even though Education took these measures, some data were still missing for some states.

To determine how school construction expenditures were broken down by grade or school level (primary school, middle school, and high school) and by kind of construction (new schools, additions, and renovations), we obtained data from F. W. Dodge Inc., a division of McGraw-Hill Companies, because Education data did not contain these breakouts. F. W. Dodge collects data nationwide for all kinds of private and public construction projects, including K-12 school facilities. The firm's data measure the value of contracts public schools or other public entities awarded to private firms for the construction or renovation of public K-12 school facilities. Unlike the Education data we used, F. W. Dodge's data do not include expenditures for land, acquired buildings, or architect and engineering design activities. Additionally, school expenditures for the use of in-house staff or other resources of the public school entities for the purposes of constructing school facilities are included in Education's data but not in F. W. Dodge's data.

We used F. W. Dodge's data to compute national and regional trends for each kind of school and each kind of construction project for calendar years 1990-98. We adjusted the data for calendar years 1990-97 to constant 1998 dollars, using the gross domestic product price index. We did not verify the accuracy of the data we obtained from F. W. Dodge.

To determine how school construction projects are funded, we identified and reviewed research on school construction financing sources and conducted a telephone inquiry of each of the 50 state education agencies. Through the telephone survey, we identified states that collect information from the local education agencies on voter-approved school construction bonds that pass and fail and on their 1998 dollar amounts.

We conducted our fieldwork from February through December 1999 in accordance with generally accepted government auditing standards.

Changes in Annual State School Construction Expenditures From Fiscal Year 1990 to Fiscal Year 1997

	Annual expenditures		Change	
Region and state	**1990**	**1997**	**Dollars**	**Percent**
Northeast				
Connecticut	$17,482,435	$33,257,748	$15,775,313	90.2%
Maine	115,688,863	44,225,118	-71,463,745	-61.8
Massachusetts	60,590,794	31,926,031	-28,664,763	-47.3
New Hampshire	117,724,812	110,912,249	-6,812,563	-5.8
New Jersey	137,969,243	735,794,720	597,825,477	433.3
New York	1,425,066,856	1,787,446,267	362,379,411	25.4
Pennsylvania	1,086,908,888	1,200,977,174	114,068,286	10.5
Rhode Island	2,939,711	8,016,709	5,076,998	172.7
Vermont	31,352,439	83,681,866	52,329,427	166.9
Total	**$2,995,724,042**	**$4,036,237,882**	**$1,040,513,840**	**34.7%**
Midwest				
Illinois	$808,822,550	$1,210,214,932	$401,392,382	49.6%
Indiana	399,266,035	554,053,090	154,787,055	38.8
Iowa	120,186,443	182,617,511	62,431,068	51.9
Kansas	169,822,322	81,461,772	-88,360,550	-52.0
Michigan	518,034,186	1,120,381,516	602,347,330	116.3
Minnesota	493,522,410	854,746,110	361,223,700	73.2
Missouri	311,326,902	362,801,611	51,474,709	16.5
Nebraska	102,635,307	136,915,222	34,279,915	33.4
North Dakota	24,112,630	26,489,593	2,376,963	9.9
Ohio	372,635,053	679,989,223	307,354,170	82.5
South Dakota	31,656,864	36,181,823	4,524,959	14.3
Wisconsin	240,930,021	605,690,863	364,760,842	151.4
Total	**$3,592,950,722**	**$5,851,543,266**	**$2,258,592,544**	**62.9%**
South				
Alabama	$228,644,407	$287,828,745	$59,184,338	25.9%
Arkansas	92,358,852	125,903,107	33,544,255	36.3
Delaware	25,593,095	60,370,550	34,777,455	135.9
District of Columbia	39,446,634	43,940,239	4,493,605	11.4
Florida	1,716,075,675	1,910,535,292	194,459,617	11.3
Georgia	610,050,658	861,931,564	251,880,906	41.3
Kentucky	62,535,737	70,044,741	7,509,004	12.0
Louisiana	177,560,031	152,737,466	-24,822,565	-14.0

	Annual expenditures		Change	
Region and state	**1990**	**1997**	**Dollars**	**Percent**
Maryland	395,093,018	518,801,968	123,708,950	31.3
Mississippi	81,078,879	156,124,935	75,046,056	92.6
North Carolina	518,892,880	714,961,739	196,068,859	37.8
Oklahoma	241,696,773	135,963,740	-105,733,033	-43.7
South Carolina	277,427,184	390,898,295	113,471,111	40.9
Tennessee	185,879,267	380,039,655	194,160,388	104.5
Texas	1,870,901,824	2,446,640,238	575,738,414	30.8
Virginia	512,689,453	623,842,806	111,153,353	21.7
West Virginia	36,442,828	96,761,018	60,318,190	165.5
Total	**$7,072,367,197**	**$8,977,326,098**	**$1,904,958,901**	**26.9%**
West				
Alaska	$41,211,270	$126,972,418	$85,761,148	208.1%
Arizona	455,654,395	467,662,439	12,008,044	2.6
California	2,000,367,162	2,302,099,441	301,732,279	15.1
Colorado	258,175,973	620,617,810	362,441,837	140.4
Hawaii	61,855,731	123,703,629	61,847,898	100.0
Idaho	42,664,461	145,668,470	103,004,009	241.4
Montana	56,114,601	33,266,541	-22,848,060	-40.7
Nevada	205,398,799	311,600,198	106,201,399	51.7
New Mexico	145,330,637	253,074,817	107,744,180	74.1
Oregon	118,365,788	347,301,016	228,935,228	193.4
Utah	103,394,643	280,989,713	177,595,070	171.8
Washington	634,352,484	761,098,864	126,746,380	20.0
Wyoming	23,689,363	57,150,184	33,460,821	141.2
Total	**$4,146,575,307**	**$5,831,205,540**	**$1,684,630,233**	**40.6%**
U.S. total	**$17,807,617,268**	**$24,696,312,786**	**$6,888,695,518**	**38.7%**

Note: In 1997 dollars.

Source: U.S. Department of Education.

Changes in Regional School Construction Expenditures for Land, Buildings, and Equipment, Fiscal Years 1992-97

	Northeast	Midwest	South	West	Total
Land					
1992	$830,851,194	$293,686,114	$1,097,299,352	$463,061,676	$2,684,898,336
1997	684,752,698	592,172,395	435,413,393	656,996,570	2,369,335,056
$ change	-$146,098,496	$298,486,281	-$661,885,959	$193,934,894	-$315,563,280
% change	-17.6%	101.6%	-60.3%	41.9%	-11.8%
Acquired buildings					
1992	$377,305,846	$1,510,445,138	$1,596,674,555	$2,066,150,709	$5,550,576,248
1997	61,312,426	173,529,065	2,499,989,895	476,101,115	3,210,932,501
$ change	-$315,993,420	-$1,336,916,073	$903,315,340	-$1,590,049,594	-$2,339,643,747
% change	-83.7%	-88.5%	56.6%	-77.0%	-42.2%
Constructed buildings					
1992	$1,578,305,207	$1,702,595,003	$3,910,307,078	$2,048,296,154	$9,239,503,442
1997	3,105,293,185	4,184,360,008	5,268,577,360	4,164,409,859	16,722,640,412
$ change	$1,526,987,978	$2,481,765,005	$1,358,270,282	$2,116,113,705	$7,483,136,970
% change	96.7%	145.8%	34.7%	103.3%	81.0%
Equipment					
1992	$456,169,378	$422,720,811	$607,243,905	$374,106,895	$1,860,240,990
1997	184,879,573	901,481,798	773,345,450	533,697,996	2,393,404,817
$ change	-$271,289,805	$478,760,987	$166,101,545	$159,591,101	$533,163,827
% change	-59.5%	113.3%	27.4%	42.7%	28.7%

Note: In constant 1997 dollars.

Source: U.S. Department of Education.

Average Annual State School Construction Expenditures per Student, Fiscal Years 1990-97

State	Total	Average per year	Average per student per year
Alabama	$1,551,579,473	$193,947,434	$265
Alaska	739,850,611	92,481,326	759
Arizona	4,305,612,605	538,201,576	773
Arkansas	916,681,883	114,585,235	258
California	17,513,021,641	2,189,127,705	417
Colorado	3,294,148,874	411,768,609	667
Connecticut	144,622,543	18,077,818	37
Delaware	333,504,567	41,688,071	399
District of Columbia	226,294,798	28,286,850	352
Florida	14,143,070,060	1,767,883,757	877
Georgia	5,137,812,623	642,226,578	523
Hawaii	703,550,019	87,943,752	491
Idaho	762,889,360	95,361,170	410
Illinois	5,378,199,606	672,274,951	357
Indiana	3,785,099,551	473,137,444	490
Iowa	1,218,014,087	152,251,761	308
Kansas	734,255,420	91,781,927	203
Kentucky	802,972,138	100,371,517	155
Louisiana	1,142,491,267	142,811,408	180
Maine	566,549,318	70,818,665	330
Maryland	2,989,958,884	373,744,861	491
Massachusetts	342,573,635	42,821,704	49
Michigan	5,798,446,152	724,805,769	450
Minnesota	5,263,465,426	657,933,178	825
Mississippi	881,727,371	110,215,921	218
Missouri	2,883,718,330	360,464,791	420
Montana	351,480,150	43,935,019	275
Nebraska	1,115,640,217	139,455,027	493
Nevada	1,734,638,927	216,829,866	934
New Hampshire	585,950,609	73,243,826	399
New Jersey	3,460,640,456	432,580,057	379
New Mexico	1,458,048,463	182,256,058	575
New York	13,297,370,342	1,662,171,293	614

State	Total	Average per year	Average per student per year
North Carolina	4,447,661,879	555,957,735	491
North Dakota	212,047,429	26,505,929	223
Ohio	3,955,509,329	494,438,666	274
Oklahoma	1,475,607,506	184,450,938	308
Oregon	1,534,340,325	191,792,541	378
Pennsylvania	8,624,372,007	1,078,046,501	623
Rhode Island	47,892,249	5,986,531	41
South Carolina	2,112,733,556	264,091,695	414
South Dakota	352,063,648	44,007,956	321
Tennessee	1,967,850,022	245,981,253	286
Texas	18,039,309,919	2,254,913,740	631
Utah	1,677,754,867	209,719,358	452
Vermont	361,417,654	45,177,207	449
Virginia	4,104,146,867	513,018,358	494
Washington	6,147,436,619	768,429,577	854
West Virginia	764,308,148	95,538,519	303
Wisconsin	3,315,586,301	414,448,288	496
Wyoming	315,188,234	39,398,529	395
U.S. total and average	**$163,019,105,967**	**$20,377,388,246**	**$473**

Note: In constant 1997 dollars.

Source: U.S. Department of Education.

Comments From the Department of Education

UNITED STATES DEPARTMENT OF EDUCATION

OFFICE OF ELEMENTARY AND SECONDARY EDUCATION

THE ASSISTANT SECRETARY

Ms. Barbara D. Bovbjerg
Associate Director, Education, Workforce
And Income Security Issues
Health, Education, and
Human Services Division
United States General Accounting Office
Washington, D.C. 20548

FEB - 2000

Dear Ms. Bovbjerg:

Thank you for providing the U.S. Department of Education with the opportunity to comment on the General Accounting Office (GAO) draft report, School Facilities: Construction Expenditures Have Grown Significantly in Recent Years. GAO has added substantially to our knowledge about school construction with its series of reports on the subject, including School Facilities: Condition of America's Schools, which estimated that $112 billion was needed, in 1995, to bring the Nation's public elementary and secondary school facilities into good overall condition.

We concur with the primary finding in the draft report, that school construction expenditures have increased between the early 1990's, when the economy was performing poorly, and the late 1990's, when the economy had improved substantially. However, GAO might note that the data in the report would not substantiate a conclusion that the school facilities crisis you identified five years ago is subsiding. Each year, most school districts must invest in maintaining and improving school facilities as buildings deteriorate, enrollments increase, and students move to new locations that have insufficient classroom space. From the GAO draft report, it is unclear whether the recent increases in expenditures on school facilities: (1) sufficiently compensate for these factors, and (2) are sustainable in the event of an economic downturn. The draft report, while very useful, does not provide evidence on whether the conditions in place in 1995 have worsened, improved, or remained the same.

The National Center for Education Statistics, in consultation with GAO staff, has been working on a survey report that will examine the cost of bringing schools into good overall condition. We expect this report, which should be available this summer, to fill much of the information gap on the school facilities issue.

Part of the GAO draft report attempts to describe the Federal role in supporting school construction. We recommend that this section be revised to incorporate a more complete

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description. Historically, the Federal Government's established role has been to allow States and local communities to issue bonds whose interest is exempt from Federal income tax. Because the bond holders do not have to pay taxes on this interest, the community can sell the bond at a lower interest rate than would otherwise be the case. (In current market conditions, these savings amount to about one-third of the interest costs.) The report also fails to mention Qualified Zone Academy Bonds (QZABs), which are being used in numerous communities for renovation projects.

Finally, the draft report states that while enrollment increased 12 percent from 1990 to 1997, school construction expenditures during the same period rose 39 percent. This statement may mislead some readers into thinking that a 12 percent increase in school construction expenditures could accommodate a 12 percent increase in enrollment. Due to the high cost of new school construction and additions, we believe that a more useful analysis would examine the cost of accommodating a 12 percent increase in enrollment and compare that cost estimate with the 39 percent increase. In addition, the 39 percent increase includes prior unmet needs, while a 12 percent increase does not.

Additional technical comments are enclosed. Thank you again for the opportunity to review and comment on the draft report.

Sincerely,

Michael Cohen

Enclosure

Related GAO Products

School Facilities: Reported Condition and Costs to Repair Schools Funded by Bureau of Indian Affairs (GAO/HEHS-98-47, Dec. 31, 1997).

School Facilities: America's Schools Report Differing Conditions (GAO/HEHS-96-103, June 14, 1996).

School Facilities: Profiles of School Condition by State (GAO/HEHS-96-148, June 24, 1996).

School Facilities: Accessibility for the Disabled Still an Issue (GAO/HEHS-96-73, Dec. 29, 1996).

School Facilities: States' Financial and Technical Support Varies (GAO/HEHS-96-27, Nov. 28, 1995).

School Facilities: America's Schools Not Designed or Equipped for 21st Century (GAO/HEHS-95-95, Apr. 4, 1995).

School Facilities: Condition of America's Schools (GAO/HEHS-95-61, Feb. 1, 1995).

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